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Notice to Clinicians: Summary of CDC Recommendations for Influenza Antiviral Medications

CDC continues to recommend antiviral medications for treatment of seasonal influenza and annual vaccination as the best tools for preventionⁱ.

Evidence from past influenza seasons and the 2009 H1N1 pandemic has shown that treatment with antiviral medications can have clinical and public health benefit in reducing severe outcomes of influenza when initiated as soon as possible after illness onset.

Clinical trials and observational data show that early antiviral treatment may do the following:

- shorten the duration of fever and illness symptoms
- reduce the risk of complications from influenza (e.g., otitis media in young children, pneumonia, respiratory failure) and death
- shorten the duration of hospitalization

Below is a summary of CDC's influenza antiviral recommendations.

Summary of CDC recommendations for influenza antiviral medications for the 2012-2013 season:

Clinical benefit is greatest when antiviral treatment is administered early. When indicated, antiviral treatment should be started as soon as possible after illness onset, ideally within 48 hours of symptom onset. However, antiviral treatment might still be beneficial in patients with severe, complicated, or progressive illness and in hospitalized patients when started after 48 hours of illness onset, as indicated by observational studies.

Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who

- is hospitalized;
- o has severe, complicated, or progressive illness; or
- o is at higher risk for influenza complications. This list includes:
 - children aged younger than 2 years;
 - · adults aged 65 years and older;
 - persons with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopment conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental

- retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury);
- persons with immunosuppression, including that caused by medications or by HIV infection;
- women who are pregnant or postpartum (within 2 weeks after delivery);
- persons aged younger than 19 years who are receiving long-term aspirin therapy;
- American Indians/Alaska Natives;
- persons who are morbidly obese (i.e., body-mass index is equal to or greater than 40); and
- residents of nursing homes and other chronic-care facilities.

Clinical judgment, on the basis of the patient's disease severity and progression, age, underlying medical conditions, likelihood of influenza, and time since onset of symptoms, is important when making antiviral treatment decisions for high-risk outpatients.

Decisions about starting antiviral treatment should not wait for laboratory confirmation of influenza.

While influenza vaccination is the first and best way to prevent influenza, a history of influenza vaccination does not rule out the possibility of influenza virus infection in an ill patient with clinical signs and symptoms compatible with influenza.

Antiviral treatment also can be considered for any previously healthy, symptomatic outpatient not at high risk with confirmed or suspected influenza on the basis of clinical judgment, if treatment can be initiated within 48 hours of illness onset.

For more information:

A full summary of clinical recommendations that includes the sections listed below is available at http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm:

- Antiviral Medications Recommended for Treatment and Chemoprophylaxis of Influenza
- Summary of Influenza Antiviral Treatment Recommendations
- Diagnostic Testing for Influenza
- Recommended Dosage and Duration of Treatment or Chemoprophylaxis for Influenza Antiviral Medications
- Chemoprophylaxis
- Adverse Events
- Footnotes
- Selected References

CDC communication to health care providers:

- CDC Information for Pharmacists http://www.cdc.gov/flu/professionals/2012-2013-guidance-pharmacists.htm
- CDC Influenza Update for Pediatricians http://www.cdc.gov/flu/professionals/2012-2013-guidance-pediatricians.htm

FDA Announcement Addressing Intermittent Shortages of Oseltamivir Phosphate (Tamiflu ®) for Oral Suspension (6mg/mL 60 mL):

On January 10, 2013, the U.S. Food and Drug Administration (FDA) released information indicating there may currently be intermittent shortages of Oseltamivir Phosphate (Tamiflu®) for Oral Suspension

(6mg/mL 60 mL) - used to treat influenza in children - due to increased demand for the drug. This is the pediatric suspension (liquid). Instructions for pharmacists on how to compound an oral suspension from Tamiflu® 75 mg (adult) capsules are available at

http://www.tamiflu.com/hcp/resources/hcp_resources_pharmacists.jsp. These instructions provide for an alternative oral suspension when commercially manufactured oral suspension formulation is not readily available.

In some cases, clinicians may consider substituting a 30 or 45 mg capsule for children (if dose is appropriate) rather than suspension, particularly if there are spot shortages of suspension. These capsules may be opened and mixed with a sweet liquid, such as regular or sugar-free chocolate syrup, if oral suspension is not available. Instructions to share with caregivers are available here: www.cdc.gov/flu/antivirals/mixing_tamiflu_qa.htm.

¹ Findings from early data indicate the overall effectiveness of the 2012-2013 seasonal influenza vaccine is 62%. The data are published in "Early Estimates of Seasonal Influenza Vaccine Effectiveness — United States, January 2013," in the January 11, 2013, Morbidity and Mortality Weekly Report. This estimate is within the range of what is expected during seasons when most circulating influenza viruses characterized by CDC are like the viruses included in the vaccine.

At this time, people seeking vaccination may need to call more than one provider to locate vaccine. The flu vaccine locator (http://flushot.healthmap.org/) may be helpful.

ii On December 21, 2012, the U.S. Food and Drug Administration (FDA) approved the antiviral medication oseltamivir (trade name Tamiflu®) for the treatment of influenza in people aged 2 weeks and older. An FDA press release related to this announcement is available at http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm333205.htm

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

Categories of Health Alert Network messages:

Health Alert Requires immediate action or attention; highest level of importance

Health Advisory May not require immediate action; provides important information for a specific incident or situation **Health Update** Unlikely to require immediate action; provides updated information regarding an incident or situation **HAN Info Service** Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, public information officers, epidemiologists, HAN coordinators, and clinician organizations##